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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/899,944	07/09/2001	William Yu	3313-0355P-SP	5948

2292 7590 10/05/2004

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EXAMINER

YANCHUS III, PAUL B

ART UNIT PAPER NUMBER

2116

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/899,944

Applicant(s)

YU, WILLIAM

Examiner

Paul B Yanchus

Art Unit

2116

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 7/9/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 8-11 is/are rejected.
- 7) ☒ Claim(s) 2-7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Reference number 11 in Figures 2 and 3. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Allowable Subject Matter***

Claims 2-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kataoka et al. [Kataoka], US Patent no. 6,342,752 and Applicant's Admitted Prior Art [AAPA], in view of, Ferguson, US Patent no. 4,703,191.

Regarding claim 1, Kataoka discloses a well known portable information processing system comprising:

a piezoelectric unit [piezoelectric transformer element] to produce a voltage for the portable information processing system to function normally [column 1, lines 19-21]; and

a display unit [liquid crystal display], which is connected with the piezoelectric unit to display the current status of the portable information processing system [column 1, lines 11-21].

Kataoka does not disclose a control unit to control the work status of the information processing system. AAPA teaches a well known control unit [inverter protection circuit] which controls the work status of an information processing system [portable computer, page 1, lines 17-20]. One would be motivated to include the well known control unit disclosed by AAPA into the Kataoka system in order to protect the system from being damaged if the piezoelectric unit experiences abnormal activity [AAPA, page 3, lines 18-20].

Kataoka and AAPA do not disclose a frequency division unit, which is connected with the control unit to detect the voltage of the portable information processing system and to produce a frequency division voltage for the control unit to function correctly when an abnormal voltage activity is detected. Ferguson teaches a system for supplying an auxiliary signal to a computer if an abnormal power supply condition is detected [column 3, line 65 – column 4, line

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5]. One would be motivated to include the Ferguson system in the system taught by Kataoka and AAPA in order to continuously supply power to the information processing unit and consequently prevent potential data loss even if the primary power supply operates abnormally [Ferguson, column 1, lines 19-29].

Regarding claim 8, Kataoka states that the backlight of the liquid crystal display is a cold cathode tube [column 1, lines 11-12].

Regarding claim 9, AAPA states that the control unit is an inverter protection circuit [page 3, lines 18-20].

Regarding claim 10, Kataoka states that the piezoelectric unit is a piezoelectric transformer [column 1, lines 19-21].

Regarding claim 11, Kataoka states that the portable information processing device is a notebook personal computer [column 1, lines 11-12].

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ishikawa, et al., US Patent no. 6,172,447, discloses a well known piezoelectric transformer power supply system for notebook computers.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul B Yanchus whose telephone number is (703) 305-8022. The examiner can normally be reached on Mon-Thurs 8:00-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on (703) 308-1159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Paul Yanchus  
September 29, 2004

  
LYNNE H. BROWNE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3000 2100